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REMARKS

Claims 1, 3-10, 14-18 and 21-22 are all the claims pending in the application. Applicant has canceled claims 2, 11-13 and 19-20 without prejudice or disclaimer. Applicant has added new claims 21 and 22. Applicant submits that cancellation of claims 11-13 obviates the drawing objection and requests reconsideration and withdraw of this objection. Applicant has further amended the specification to address the minor, inadvertent typographical errors with replacements sheets and also has submitted a new Abstract in clean text. Therefore, Applicant respectfully requests cancellation of the previous Abstract (See 37 CFR Section 1.72). Finally, Applicant respectfully traverses the prior art rejection based on the following discussion.

I. The Claim Objection and the 35 U.S.C. 112, Second Paragraph Rejection

In response to the claim objection, Applicant, as indicated above, has amended Claim 10 consistent with the Examiner's comments.

In response to the 35 U.S.C. 112 rejection, Applicant, as indicated above has canceled claims 13 and 19-20 without prejudice consistent with the comments.

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw the objection and the rejections

II. The Prior Art Rejection

Claims 1-9 and 14, are rejected under 35 U.S.C. 102(b) as anticipated by Melvin. ("Melvin")(U.S. 846,571). Claims 1, 4, 10-12 and 14, are rejected under 35 U.S.C. 102(b) as anticipated by Pemberton, et al. ("Pemberton")(U.S. 5,772,319).

Claims 1-5 and 8-10, are rejected under 35 U.S.C. 102(b) as anticipated by Benjamins. ("Benjamins")(U.S. 1,268,813). Claims 1, 4, 14-16 and 19-20, are rejected under 35 U.S.C. 102(b) as anticipated by Donaghue, et al. ("Donaghue")(U.S. 4,369,689). Claims 11-13 are rejected under 35 U.S.C. 103(a) as being Benjamins in view of Campbell, et al. ("Campbell")(U.S. 6,582,160). Claim 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Donaghue.

A. The Rejection Based on Melvin

Regarding claims 1-9 and 14, Melvin fails to disclose, teach or suggest the features of independent claim 1, and related dependent claims 2-9 and 14, including at least two baffles are arranged along separate baffle levels where each baffle of at least two baffles is inter-spaced at equal vertical distances so that each baffle extends from an inner side of the extender and is oriented at an angle toward a lower baffle of at least two baffles. (See Page 6, line 11-Page 7, line 13; and Figure 1).

Indeed, Figures 1-4 of Melvin merely teaches a conventional mixing device for mixing commodities, such as, teas, ground coffees or different flours. In particular, this mixing device, in part, includes blades (ff) in series at different levels supported by and extended downward and inward from the wall of the inclosing casing (A). Further, each blade (f), (what the Examiner analogizes to Applicant's baffle) in its length, extends angular to a face of an attachment portion 12 and, importantly, also is inclined at its width. Based on the large number of blades (f) at each different level, this structural configuration is designed to obtain a more efficient distribution and intercommingling of

the materials to be mixed by the device. Accordingly, Applicant respectfully submits that the Office Action mischaracterizes the Melvin invention as disclosing the extender having the recited angled baffles like Applicant's disclosed and claimed invention. Indeed, Melvin clearly teaches a large number of blades (f) at each different level where each blade (f) is inclined at its width not a baffle at each level where each baffle is only inclined in length. (See Column 1, lines 9-20; Column 2, lines 53-100; Column 3, 19-64; and Figures 1-4; and Office Action, Pages 5-6, Section 12).

Further, please note, consistent with the above description and function, Melvin also discloses that the inclosing casing (A) is cylindrical with a specific diameter and includes a lower end delivery portion b, which is contracted or of a decreased diameter. Thus, this configuration is unlike Applicant's invention as recited in new claim 21. (See Column 2, lines 53-57).

In contrast, Applicant discloses a feed device, and related method, for extending the processing runs of manufacturing explosive materials. The feed device 10 includes, in part, a feed hopper 20 and an extender 30 attached to the feed hopper 20. A novel feature of this structure is that at least two baffles 32 are arranged along separate baffle levels where each baffle 32 is inter-spaced at equal vertical distances so that each baffle 32 extends from an inner side of the extender 30. Further, each baffle 32 is oriented downward and inwardly at an angle toward a lower baffle 32 of the at least two baffles 32. Accordingly, each baffle 32 is only inclined in length in relation to an inner side of the extender 30. However, a width of each baffle 32 is level in relation to an inner side of the extender in order to retain material (see below) not inclined or slanted like Melvin's invention. Therefore, the unexpected result of the above optimized structural

configuration is that each baffle 32 at each baffle level retains a given amount of the processing materials 100. Thus, the weight of the processing materials 100 remains segmented within the extender 30, which minimizes gelling or conglomeration of the processing materials 100, and allows for extended run times in the manufacture of explosive materials compared to conventional unit batch processing. (See Page 1, line 14-Page 2, line 6; Page 3, line 13-Page 5, line 1; and Page 8, line 14-Page 10, level 16).

Further, please note, Applicant's extender 30, in an embodiment, includes an interior diameter substantially the same as the interior diameter of the feed hopper 20. (See Page 5, lines 14-16).

Accordingly, Applicants' invention includes at least two baffles arranged along separate baffle levels where each baffle is inter-spaced at equal vertical distances so a length portion of each baffle is angled downward in relation to an inner side of the extender but a width portion of each baffle is level in relation to the inner side of the extender, whereas the Melvin structure is specifically configured to include multiple blades at each blade level where the length and the width portions of each blade are angled downward. Thus, the angling of the width portion of each blade suggests that the blades cannot be inter-spaced at equal vertical distances as the width portion of each blade is not level in relation to a non-level width portion of another blade at a different blade level.

Further, Melvin only teaches and suggests that the extender has two different diameters where the lower portion of the extender has a decreased diameter compared to the upper portion, whereas Applicant's invention, in an embodiment, for example as recited in new claim 21, includes an extender with a substantially the same interior

diameter of a feed hopper. Thus, an attempt to substitute Melvin's configuration of mixing coffee or tea using multiple blades at different blade levels where each blade is angled in a length and width direction could not retain a given amount of processing materials at each baffle level where the weight of the processing materials remains segmented within the extender of Applicant's invention. The processing material using Melvin's structure would simply conglomerate at the bottom of the extender and not produce the extended run times in the manufacture of explosive materials like Applicant's inventive structure. Thus, Applicant's invention is structurally distinct from the conventional Melvin structure. (See above).

Therefore, Melvin does not disclose, teach or suggest including at least two baffles are arranged along separate baffle levels where each baffle of at least two baffles is inter-spaced at equal vertical distances so that each baffle extends from an inner side of the extender and is oriented at an angle toward a lower baffle of at least two baffles. (See above).

Based on the above, Applicant traverses the assertion that Melvin discloses or teaches Applicants' invention of independent claim independent claim 1, and related dependent claims 2-9 and 14.

B. The Rejection Based on Pemberton

Regarding claims 1, 4, 10, 11, 12, and 14, Pemberton fails to disclose, teach or suggest the features of independent claim 1, and related dependent claims 4, 10-12 and 14, including at least two baffles are arranged along separate baffle levels where each baffle of at least two baffles is inter-spaced at equal vertical distances so that each baffle

extends from an inner side of the extender and is oriented at an angle toward a lower baffle of at least two baffles. (See Page 6, line 11-Page 7, line 13; and Figure 1).

Indeed, Figures 1, 2, and 6 of Pemberton merely teach a conventional material loader for an injection molding press. In particular, the material loader, in part, includes a collection tube 34 and a hopper 12 with a main compartment 18. The main compartment 18 includes a side wall 20 from which extends a first inlet tube 22 and a second inlet tube 24. A deflector plate 26, (what the Examiner analogizes to Applicant's baffle) is located within the main compartment 18. In particular, the deflector plate 26 extends at, what appears to be, an angle of 45 degrees with respect to the axes of the two inlet tubes 22, 24. Accordingly, plastic material enters through the inlet tubes 22, 24 and impinges upon the deflector plate 26 and moves in a direction of arrow 28 down into a bottom portion 30 of the hopper 12. Further, bottom portion 30 has inwardly tapering side walls to convey the plastic material in a direction of arrow 32 into the collection tube 34. Importantly, an air assist tube 66 extends centrally through the collection tube 34. The air assist tube 66 includes a plurality of air holes 72 for releasing air to assist in agitation, which minimizes bridging and clogging of the supply material. Accordingly, Applicant respectfully submits that the Office Action mischaracterizes the Pemberton invention as disclosing the extender having the recited angled baffles like Applicant's disclosed and claimed invention. (See Column 1, lines 9-37 and lines 58-65; Column 5, lines 1-61; and Figures 1, 2 and 6; and Office Action, Page 6, Section 13).

In contrast, as discussed above, Applicants' invention includes at least two baffles arranged along separate baffle levels where each baffle is inter-spaced at equal vertical distances so a length portion of each baffle is angled downward in relation to an inner

side of the extender, whereas the Pemberton invention only discloses a single deflector plate, let alone, at least two baffles arranged along separate baffle levels where each baffle is inter-spaced at equal vertical distances so a length portion of each baffle is angled downward in relation to an inner side of the extender.

Further, Pemberton only teaches and suggests that a bottom portion 30 of the hopper 12 has inwardly tapering side walls to convey the plastic material in a downward direction, whereas Applicant's invention, in an embodiment, for example as recited in new claim 21, includes an extender with a substantially the same interior diameter of a feed hopper. Accordingly, an attempt to substitute Pemberton's configuration, primarily using air to assist in agitation of plastic material and minimize clogging of a material supply, could not retain a given amount of processing materials at each baffle level where the weight of the processing materials remains segmented within the extender of Applicant's invention. Thus, the Pemberton structure could not likely produce the extended run times in the manufacture of explosive materials like Applicant's inventive structure. Therefore, Applicant's invention is structurally distinct from the conventional Pemberton structure. (See above).

Therefore, Pemberton does not disclose, teach or suggest including at least two baffles are arranged along separate baffle levels where each baffle of at least two baffles is inter-spaced at equal vertical distances so that each baffle extends from an inner side of the extender and is oriented at an angle toward a lower baffle of at least two baffles. (See above).

Based on the above, Applicant traverses the assertion that Pemberton discloses or teaches Applicants' invention of independent claim independent claim 1, and related dependent claims 4, 10-12 and 14.

C. The Rejection Based on Benjamins

Regarding claims 1-5 and 8-10, Benjamins fails to disclose, teach or suggest the features of independent claim 1, and related dependent claims 2-4 and 8-10, including at least two baffles are arranged along separate baffle levels where each baffle of at least two baffles is inter-spaced at equal vertical distances so that each baffle extends from an inner side of the extender and is oriented at an angle toward a lower baffle of at least two baffles. (See Page 6, line 11-Page 7, line 13; and Figure 1).

Indeed, Figure 1 of Benjamins merely teaches a conventional machine for mixing flour and other material. In particular, the machine, in part, includes a conical casing 11 (what the Examiner analogizes to Applicant's extender) with a lower end, which terminates at a cylindrical spout 21. A plurality of guides 15-19 (what the Examiner analogizes to Applicant's baffles) are configured parallel to a side of the conical casing 11. In particular, the series of coaxial conical guides 15-19 may be secured to spacing plates 34 of the conical casing 11 and terminate at the cylindrical spout 21. Accordingly, mixing flour poured into an inlet 29 is drawn down through the coaxial conical guides 15-19, which prevents jamming or chocking of the mixed materials, as the mixing flour enters the cylindrical spout. Please note, the conical casing 11 has a decreasing diameter as it terminates at the cylindrical spout 21. Accordingly, Applicant respectfully submits that the Office Action mischaracterizes the Benjamins

invention as disclosing the extender having the recited angled baffles like Applicant's disclosed and claimed invention. (See Column 1, lines 9-37 and lines 58-65; Column 5, lines 1-61; and Figures 1, 2 and 6; and Office Action, Page 6, Section 14).

In contrast, as discussed above, Applicants' invention includes at least two baffles arranged along separate baffle levels where each baffle is inter-spaced at equal vertical distances so a length portion of each baffle is angled downward in relation to an inner side of the extender, whereas the Benjamins invention only discloses a series of coaxial conical guides oriented parallel to each other and parallel to the conical casing in an angularly downward direction toward a cylindrical spout without any separate baffle levels, let alone, where each baffle is inter-spaced at equal vertical distances.

Further, as indicated above, Benjamins only teaches and suggests the conical casing 11 with a decreasing diameter terminating at the cylindrical spout 21 to convey the mixed flour in a downward direction, whereas Applicant's invention, in an embodiment, for example as recited in new claim 21, includes an extender with a substantially the same interior diameter of a feed hopper. Accordingly, an attempt to substitute Benjamin's configuration primarily using a series of coaxial conical guides without any baffle levels to minimize clogging of a flour mixing material could not retain a given amount of processing material at each baffle level where the weight of the processing materials remains segmented within the extender 30. Thus, the Benjamins' structure could not likely produce the extended run times in the manufacture of explosive materials like Applicant's inventive structure. Therefore, Applicant's invention is structurally distinct from the conventional Benjamins' structure. (See above).

Therefore, Benjamins does not disclose, teach or suggest including at least two baffles are arranged along separate baffle levels where each baffle of at least two baffles is inter-spaced at equal vertical distances so that each baffle extends from an inner side of the extender and is oriented at an angle toward a lower baffle of at least two baffles. (See above).

Based on the above, Applicant traverses the assertion that Benjamins discloses or teaches Applicants' invention of independent claim independent claim 1, and related dependent claims 2-5 and 8-10.

D. The Rejection Based on Donaghue

Regarding claims 1, 4, 14-16 and 19-20, Donaghue fails to disclose, teach or suggest the features of independent claims 1 and 15, and related dependent claims 4, 14, 16 and 19-20, including at least two baffles are arranged along separate baffle levels where each baffle of at least two baffles is inter-spaced at equal vertical distances so that each baffle extends from an inner side of the extender and is oriented at an angle toward a lower baffle of at least two baffles. (See Page 6, line 11-Page 7, line 13; and Figure 1).

Indeed, Figure 3 as well as Figures 1 and 2 of Donaghue merely teach a conventional method for mixing and placing explosive compositions involving a dispersion of an explosive component located in and immobilized by a solid foam non-explosive matrix. In particular, a concentrating funnel 25 with an upper portion (what the Examiner analogizes to Applicant's extender) includes substantially horizontal inlets 26, 27 (in relation to the sides of the upper portion) and a pipe ending at a spray nozzle 28

extending vertically downward from the inlets through the concentrating funnel into a tubular product guide. A deflecting cone 24 (what the Examiner analogizes to Applicant's baffle) is formed around opposite sides of the pipe, which ends at the spray nozzle 28. In particular, as the pipe with the spray nozzle 28 is situated intermediate the sides of the upper portion of the concentrating funnel 25, the deflecting cone 24 is angled downward and outward toward the side of the upper portion of the concentrating funnel 25. Therefore, a deflecting cone 24 is mounted centrally below the auger exit and axially above the concentrating funnel 25. Accordingly, prill material falls from the auger exit over the deflecting cones 24 into the concentrating funnel to form a uniform hollow stream around the spray nozzle 28, which combines with polyurethane leaving the spray nozzle 28 to form the product.

Contrary to the assertion in the Office Action, the deflecting cone 24 is more structurally and functionally equivalent to a structure for channeling the prill toward the side of the upper portion of the concentrating funnel 25 not a baffle for retaining material in segmented layers like Applicant's invention. Accordingly, Applicant respectfully submits that the Office Action mischaracterizes the Donaghue invention as disclosing the extender having the recited angled baffles like Applicant's disclosed and claimed invention. (See Column 1, lines 5-15; Column 8, lines 3-40; Figures 1-3; and Office Action, Page 7, Section 15).

In contrast, as discussed above, Applicants' invention includes at least two baffles arranged along separate baffle levels where each baffle is inter-spaced at equal vertical distances so a length portion of each baffle is angled downward in relation to an inner side of the extender, whereas the Donaghue invention only discloses a deflector cone, at

best with two portions pointing angularly downward and toward the sides of an upper portion of a concentrating funnel, let alone, at least two baffles arranged along separate baffle levels where each baffle is inter-spaced at equal vertical distances so a length portion of each baffle is angled downward in relation to an inner side of the extender.

Further, Donaghue only teaches and suggests that a concentrating funnel 25, which has narrowing diameter, is situated under an upper portion with a substantially unchanging diameter, whereas Applicant's invention, in an embodiment, for example as recited in new claim 21, includes an extender with a substantially the same interior diameter of a feed hopper. Accordingly, an attempt to substitute Donaghue's configuration primarily using the deflecting cone to form a hollow stream of prill around a spray nozzle could not retain a given amount of processing materials at each baffle level where the weight of the processing materials remains segmented within the extender of Applicant's invention. Thus, the Donaghue structure could not likely produce the extended run times in the manufacture of explosive materials like Applicant's inventive structure. Therefore, Applicant's invention is structurally distinct from the conventional Donaghue structure. (See above).

Therefore, Donaghue does not disclose, teach or suggest including at least two baffles are arranged along separate baffle levels where each baffle of at least two baffles is inter-spaced at equal vertical distances so that each baffle extends from an inner side of the extender and is oriented at an angle toward a lower baffle of at least two baffles. (See above).

Based on the above, Applicant traverses the assertion that Donaghue discloses or teaches Applicants' invention of independent claim independent claims 1 and 15, and related dependent claims 4, 14, 16 and 19-20.

Regarding claims 17 and 18, for at least the reasons outlined above, Applicant submits that Donaghue, alone or in combination, does not disclose, teach or suggest, including at least two baffles are arranged along separate baffle levels where each baffle of at least two baffles is inter-spaced at equal vertical distances so that each baffle extends from an inner side of the extender and is oriented at an angle toward a lower baffle of at least two baffles as recited in independent claim 15, and related dependent claims 17 and 18.

Further, please note, Applicant traverses the assertion that selection of the desired size or volume in view of Donaghue would be obvious to one of ordinary skill in the art. Indeed, Applicants' inventive is focused, in part, on using baffles to retain material at each baffle level so as to segment the material without a bulking or bridging of the material at one location. Since Donaghue is focused on forming a uniform hollow stream around a spray nozzle not using the deflector cone to retain any material like Applicant's invention, nothing in Donaghue discloses, teaches or suggests retaining a certain amount of processing material, for example, as recited in claims 17 and 18. (See Office Action, Page 8, Section 18).

E. The Rejection Based on Benjamins in view of Campbell

As indicated above, Applicant has canceled claims 11-13 without prejudice or disclaimer, thus obviating the need to address this prior art rejection.

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III. Formal Matters and Conclusions

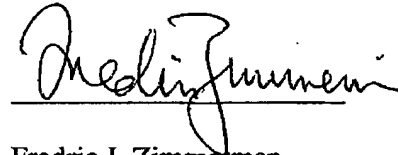
In view of the foregoing, Applicants submit that claims 1, 3-10, 14-18 and 21-22, all the claims presently pending in the application, are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary.

Please charge any deficiencies and credit any overpayment to Attorney's Deposit Account Number 50-1114.

Respectfully submitted,

Dated: November 15, 2006



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